

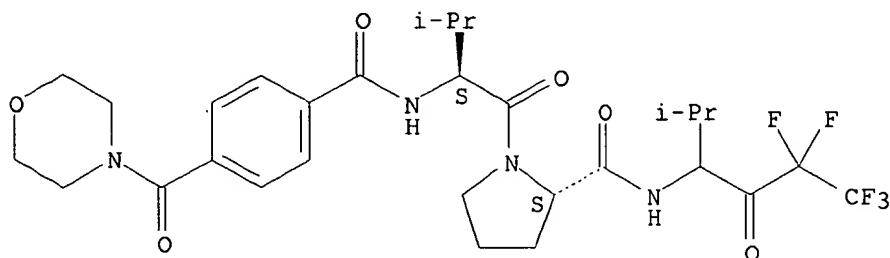
L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN 149859-17-6 REGISTRY
CN L-Prolinamide, N-[4-(4-morpholinylcarbonyl)benzoyl]-L-valyl-N-[3,3,4,4,4-pentafluoro-1-(1-methylethyl)-2-oxobutyl]- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN **MDL 101146**
FS STEREOSEARCH
MF C29 H37 F5 N4 O6
SR CA

LC STN Files: ADISINSIGHT, CA, CAPLUS, CASREACT, DRUGNL, DRUGUPDATES,
MEDLINE, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9 REFERENCES IN FILE CA (1962 TO DATE)
9 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS

AN 1997:397230 CAPLUS

DN 127:13443

TI A screening method depending on protein folding for identifying potential pharmaceutical ligands for target proteins

IN Pakula, Andrew; Bowie, James

PA Scriptgen Pharmaceuticals, Inc., USA

SO Eur. Pat. Appl., 32 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	EP 770876	A1	19970502	EP 1996-610042	19961017
	EP 770876	B1	20010418		
	R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	CA 2184195	AA	19970426	CA 1996-2184195	19960826
	AU 9664298	A1	19970501	AU 1996-64298	19960828
	AU 698862	B2	19981112		
	IL 119149	A1	20020310	IL 1996-119149	19960828
	JP 09178746	A2	19970711	JP 1996-239252	19960910
	JP 2952848	B2	19990927		
	BR 9604352	A	19980616	BR 1996-4352	19961004
	AT 200579	E	20010415	AT 1996-610042	19961017
	ES 2158269	T3	20010901	ES 1996-610042	19961017
PRAI	US 1995-547889	A	19951025		

L3 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2003 ACS
 AN 2000:545910 CAPLUS
 DN 134:159784
 TI A novel method of aligning molecules by local surface shape similarity
 AU Cosgrove, D. A.; Bayada, D. M.; Johnson, A. P.
 CS AstraZeneca, Macclesfield, SK10 4TG, UK
 SO Journal of Computer-Aided Molecular Design (2000), 14(6), 573-591
 CODEN: JCADEQ; ISSN: 0920-654X
 PB Kluwer Academic Publishers
 DT Journal
 LA English
 RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2003 ACS
 AN 1998:430286 CAPLUS
 DN 129:41393
 TI Inhibition of Human Neutrophil Elastase. 4. Design, Synthesis, X-ray
 Crystallographic Analysis, and Structure-Activity Relationships for a
 Series of P2-Modified, Orally Active Peptidyl Pentafluoroethyl Ketones
 AU Cregge, Robert J.; Durham, Sherrie L.; Farr, Robert A.; Gallion, Steven
 L.; Hare, C. Michelle; Hoffman, Robert V.; Janusz, Michael J.; Kim,
 Hwa-Ok; Koehl, Jack R.; Mehdi, Shujaath; Metz, William A.; Peet, Norton
 P.; Pelton, John T.; Schreuder, Herman A.; Sunder, Shyam; Tardif, Chantal
 CS Hoechst Marion Roussel Inc., Cincinnati, OH, 45215, USA
 SO Journal of Medicinal Chemistry (1998), 41(14), 2461-2480
 CODEN: JMCMAR; ISSN: 0022-2623
 PB American Chemical Society
 DT Journal
 LA English
 RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2003 ACS
 AN 1998:14172 CAPLUS
 DN 128:70524
 TI Inhibition of cartilage degradation in rat collagen-induced arthritis but
 not adjuvant arthritis by the neutrophil elastase inhibitor MDL 101146
 AU Janusz, Michael J.; Durham, S. L.
 CS Hoechst Marion Roussel Pharmaceuticals, Cincinnati, OH, 45215, USA
 SO Inflammation Research (1997), 46(12), 503-508
 CODEN: INREFB; ISSN: 1023-3830
 PB Birkhaeuser Verlag
 DT Journal
 LA English

L3 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS
 AN 1997:397230 CAPLUS
 DN 127:13443
 TI A screening method depending on protein folding for identifying potential
 pharmaceutical ligands for target proteins
 IN Pakula, Andrew; Bowie, James
 PA Scriptgen Pharmaceuticals, Inc., USA
 SO Eur. Pat. Appl., 32 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	EP 770876	A1	19970502	EP 1996-610042	19961017

EP 770876 B1 20010418
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL,
PT, SE

CA 2184195	AA	19970426	CA 1996-2184195	19960826
AU 9664298	A1	19970501	AU 1996-64298	19960828
AU 698862	B2	19981112		
IL 119149	A1	20020310	IL 1996-119149	19960828
JP 09178746	A2	19970711	JP 1996-239252	19960910
JP 2952848	B2	19990927		
BR 9604352	A	19980616	BR 1996-4352	19961004
AT 200579	E	20010415	AT 1996-610042	19961017
ES 2158269	T3	20010901	ES 1996-610042	19961017
PRAI US 1995-547889	A	19951025		

L3 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS

AN 1996:175625 CAPLUS

DN 124:220511

TI Acylated enol peptide derivatives as prodrugs of elastase inhibitors

IN Peet, Norton P.; Burkhart, Joseph P.; Mehdi, Shujaath

PA Merrell Dow Pharmaceuticals Inc., USA

SO PCT Int. Appl., 102 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9533478	A1	19951214	WO 1995-US5879	19950508
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN				
	RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2191844	AA	19951214	CA 1995-2191844	19950508
	AU 9526366	A1	19960104	AU 1995-26366	19950508
	AU 696292	B2	19980903		
	EP 762887	A1	19970319	EP 1995-921240	19950508
	EP 762887	B1	20010926		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	CN 1149833	A	19970514	CN 1995-193374	19950508
	HU 76131	A2	19970630	HU 1996-3309	19950508
	JP 10501221	T2	19980203	JP 1995-500893	19950508
	AT 206055	E	20011015	AT 1995-921240	19950508
	ES 2161293	T3	20011201	ES 1995-921240	19950508
	ZA 9504293	A	19960417	ZA 1995-4293	19950525
	IL 113869	A1	20000131	IL 1995-113869	19950526
	TW 406087	B	20000921	TW 1995-84105361	19950526
	US 5698523	A	19971216	US 1996-670136	19960625
	FI 9604749	A	19961128	FI 1996-4749	19961128
	NO 9605099	A	19970131	NO 1996-5099	19961129
	US 5972897	A	19991026	US 1997-882764	19970626
PRAI	US 1994-252798	A	19940602		
	US 1995-420859	A	19950419		
	WO 1995-US5879	W	19950508		
	US 1996-670136	A3	19960625		
OS	MARPAT 124:220511				

L3 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2003 ACS

AN 1996:18869 CAPLUS

DN 124:164614

TI Pharmacological evaluation of selected, orally active, peptidyl inhibitors
of human neutrophil elastase
AU Janusz, M. J.; Durham, S. L.; Hare, C. M.; Geary, J. L.; Mandagere, A. K.;
Pool, J. C.; Thompson, T. N.; Xu, D.; Angelastro, M. R.; et al.
CS Marion Merrell Dow Research Institute, Cincinnati, OH, USA
SO Journal of Pharmacology and Experimental Therapeutics (1995), 275(3),
1233-8
CODEN: JPETAB; ISSN: 0022-3565
PB Williams & Wilkins
DT Journal
LA English

L3 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 1995:298053 CAPLUS
DN 122:133822
TI Inhibition of Human Neutrophil Elastase. 3. An Orally Active Enol Acetate
Prodrug
AU Burkhart, Joseph P.; Koehl, Jack R.; Mehdi, Shujaath; Durham, Sherrie L.;
Janusz, Michael J.; Huber, Edward W.; Angelastro, Michael R.; Sunder,
Shyam; Metz, William A.; et al.
CS Marion Merrell Dow Research Institute, Cincinnati, OH, 45215, USA
SO Journal of Medicinal Chemistry (1995), 38(2), 223-33
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
OS CASREACT 122:133822

L3 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 1994:499480 CAPLUS
DN 121:99480
TI Pharmacology of N-[4-(4-morpholinylcarbonyl)benzoyl]-L-valyl-N-[3,3,4,4-
pentafluoro-1-(1-methylethyl)-2-oxobutyl]-L-prolinamide (MDL 101,146): a
potent orally active inhibitor of human neutrophil elastase
AU Durham, S. L.; Hare, C. M.; Angelastro, M. R.; Burkhart, J. P.; Koehl, J.
R.; Marquart, A. L.; Mehdi, S.; Peet, N. P.; Janusz, M. J.
CS Marion Merrell Dow Res. Inst., Cincinnati, OH, USA
SO Journal of Pharmacology and Experimental Therapeutics (1994), 270(1),
185-91
CODEN: JPETAB; ISSN: 0022-3565
DT Journal
LA English

L3 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 1993:560831 CAPLUS
DN 119:160831
TI Preparation of pentafluoroethyl peptide derivatives as orally active
elastase inhibitor
IN Peet, Norton P.; Angelastro, Michael R.; Burkhart, Joseph P.
PA Merrell Dow Pharmaceuticals, Inc., USA
SO Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 529568	A1	19930303	EP 1992-114411	19920824
	EP 529568	B1	19970115		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	AU 9221065	A1	19930225	AU 1992-21065	19920817
	AU 655831	B2	19950112		

ZA 9206185	A	19930301	ZA 1992-6185	19920817
CA 2076307	AA	19930223	CA 1992-2076307	19920818
IL 102858	A1	19981227	IL 1992-102858	19920818
HU 62014	A2	19930329	HU 1992-2709	19920819
HU 208703	B	19931228		
NO 9203280	A	19930223	NO 1992-3280	19920821
JP 05213991	A2	19930824	JP 1992-244098	19920821
JP 3311392	B2	20020805		
AT 147756	E	19970215	AT 1992-114411	19920824
ES 2099186	T3	19970516	ES 1992-114411	19920824
US 5478811	A	19951226	US 1994-323418	19941013
US 5714470	A	19980203	US 1995-483801	19950607
US 6265381	B1	20010724	US 2000-491814	20000128
PRAI US 1991-748607	A	19910822		
US 1992-918561	B1	19920729		
US 1993-127966	B1	19930928		
US 1994-323418	A2	19941013		
US 1995-438289	A3	19950510		
OS MARPAT 119:160831				

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L7 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS

AB . . . site. Results for the overlays are generally encouraging. Of particular note is the correct prediction of the "reverse orientation" for **ligands** binding to human rhinovirus coat protein HRV14.

ST mol shape binding recognition **ligand** protein enzyme receptor algorithm

IT Enzymes, biological studies

Ligands

Proteins, specific or class

Receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(novel method of aligning mols. by local surface shape similarity)

IT 56-65-5, 5'-ATP, biological studies 58-61-7, Adenosine, biological studies 117-39-5, Quercetin 24587-37-9 36357-77-4, Phosphoramidon 62996-74-1, Staurosporine 76400-07-2 84477-87-2 84478-11-5 86800-67-1 86800-68-2 86800-69-3 86835-17-8 86835-17-8 87495-31-6 98033-89-7 98034-07-2 98034-30-1 110786-00-0 119720-81-9 119777-90-1 119777-91-2 120615-25-0 120666-36-6 124811-11-6 127243-85-0 129980-23-0 139564-51-5 **149859-17-6** , MDL 101146 186610-89-9, SU 4984 215543-92-3, Su 5402 323586-61-4 323586-76-1 323586-90-9 323586-96-5 323587-08-2 323587-13-9 323587-16-2 323587-22-0 323587-33-3

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(novel method of aligning mols. by local surface shape similarity)

L7 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS

TI A screening method depending on protein folding for identifying potential pharmaceutical **ligands** for target proteins

AB A method for screening chem. compds. (test **ligands**) for potential pharmaceutical effectiveness is provided. The method identifies possible therapeutic test **ligands** by placing them in the presence of target proteins and detg. their ability to increase or decrease the ratio of. . . protein. The present methods do not require that biochem. function of the target protein be known, nor that any other **ligands** be previously identified. The methodol. of the invention was used to identify **ligands**. e.g. inhibiting Hb S polymn.

ST protein folding therapeutic **ligand** screening; pharmaceutical

ligand screening protein folding; Hb S polym inhibitor screening

IT Rev protein
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (HIV; protein-folding method for identifying potential pharmaceutical **ligands** for target proteins)

IT Polymerization
 (HbS, inhibitors; protein-folding method for identifying potential pharmaceutical **ligands** for target proteins)

IT Human immunodeficiency virus
 (Rev protein; protein-folding method for identifying potential pharmaceutical **ligands** for target proteins)

IT Polyacrylamide gel electrophoresis
 (denaturing; protein-folding method for identifying potential pharmaceutical **ligands** for target proteins)

IT Immunoassay
 (enzyme-linked immunosorbent assay; protein-folding method for identifying potential pharmaceutical **ligands** for target proteins)

IT Conformation
 (protein, target protein conformational domains; protein-folding method for identifying potential pharmaceutical **ligands** for target proteins)

IT Aggregation
 Calorimetry
 Circular dichroism spectroscopy
 Denaturants
 Detergents
 Drug screening
 Drugs
 Fluorometry
 Immobilization, biochemical
 Immunoassay
 Protein degradation
 Protein folding
 Temperature effects, biological
 UV and visible spectroscopy
 (protein-folding method for identifying potential pharmaceutical **ligands** for target proteins)

IT **Ligands**
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (protein-folding method for identifying potential pharmaceutical **ligands** for target proteins)

IT Hemoglobins
 Proteins, general, biological studies
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (protein-folding method for identifying potential pharmaceutical **ligands** for target proteins)

IT Amino acids, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (protein-folding method for identifying potential pharmaceutical **ligands** for target proteins)

IT Antibodies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (protein-folding method for identifying potential pharmaceutical **ligands** for target proteins)

IT Chaperonins
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (protein-folding method for identifying potential pharmaceutical

ligands for target proteins)
 IT 9004-06-2, Elastase
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (human neutrophil; protein-folding method for identifying potential pharmaceutical **ligands for target proteins)**
 IT 138-81-8
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (protein-folding method for identifying potential pharmaceutical **ligands for target proteins)**
 IT 54-05-7, ST 121 58-93-5, Hydrochlorothiazide 59-66-5, Acetazolamide 63-74-1, Sulfanilamide 83-89-6, ST 439 960-57-6, ST 5196 972-18-9, ST 38624 1405-89-6, ST 56 1421-65-4, ST 41769 7149-45-3, ST 38904 7252-27-9, ST 16969 7252-50-8, ST 38473 13590-98-2, ST 39008 15190-13-3, ST 38775 23652-87-1, ST 41070 32022-06-3, ST 38626 37082-08-9, ST 38222 38714-92-0, ST 38218 50482-67-2, ST 39224 51798-45-9, Elastatinal 54978-84-6, ST 43883 **149859-17-6**, MDL 101146 190255-93-7, ST 9495 190256-96-3, ST 48775 190396-13-5, MDL 103900 190396-14-6, MDL 105373 190396-29-3, ST 69
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (protein-folding method for identifying potential pharmaceutical **ligands for target proteins)**
 IT 9001-03-0, Carbonic anhydrase 9002-03-3, Dihydrofolate reductase 9034-51-9, Hb A 9035-22-7, Hb S 50926-05-1
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (protein-folding method for identifying potential pharmaceutical **ligands for target proteins)**
 IT 53-57-6, NADPH 59-05-2, Methotrexate
 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (protein-folding method for identifying potential pharmaceutical **ligands for target proteins)**
 IT 57-13-6, Urea, biological studies 9001-92-7, Protease 9073-78-3, Thermolysin 25215-10-5, Guanidinium 39450-01-6
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (protein-folding method for identifying potential pharmaceutical **ligands for target proteins)**

4/7/1 (Item 1 from file: 5)
DIALOG(R) File 5: Biosis Previews(R)
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09589615 BIOSIS NO.: 199598044533
The emergence of mass spectrometry in biochemical research.

AUTHOR: Siuzdak Gary
AUTHOR ADDRESS: Scripps Res. Inst., Dep. Chem., 10666 North Torrey Pines
Road, La Jolla, CA 92037, USA

JOURNAL: Proceedings of the National Academy of Sciences of the United
States of America 91 (24):p11290-11297 1994

ISSN: 0027-8424

DOCUMENT TYPE: Literature Review

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: The initial steps toward routinely applying mass spectrometry in the biochemical laboratory have been achieved. In the past, mass spectrometry was confined to the realm of small, relatively stable molecules; large or thermally labile molecules did not survive the desorption and ionization processes intact. Electrospray ionization (ESI) and matrix-assisted laser desorption/ionization (MALDI) mass spectrometry allow for the analysis of both small and large biomolecules through "mild" desorption and ionization methods. The use of ESI and MALDI mass spectrometry extends beyond simple characterization. Noncovalent interactions, protein and peptide sequencing, DNA sequencing, **protein folding**, in vitro **drug** analysis, and **drug discovery** are among the areas to which ESI and MALDI mass spectrometry have been applied. This review summarizes recent developments and major contributions in mass spectrometry, focusing on the applications of MALDI and ESI mass spectrometry.

4/7/14 (Item 6 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
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119085171 CA: 119(9)85171e CONFERENCE PROCEEDING
Protein cleavage mapping: A new tool for drug discovery and protein
folding studies
AUTHOR(S): Hayward, Matthew M.; Schepartz, Alanna
LOCATION: Dep. Chem., Yale Univ., New Haven, CT, 06511-8118, USA
JOURNAL: Perspect. Med. Chem. EDITOR: Testa, Bernard (Ed), DATE: 1993
PAGES: 501-12 CODEN: 59BSAH LANGUAGE: English PUBLISHER: Verlag
Helvetica Chim. Acta, Basel, Switz
SECTION:
CA201000 Pharmacology
IDENTIFIERS: review protein cleavage mapping drug development
DESCRIPTORS:
Proteins, biological studies...
cleavage mapping, in drug development
Pharmaceuticals...

US PAT NO: 5,910,580 [IMAGE AVAILABLE]

L3: 1 of 48

SUMMARY:

BSUM(75)

The foregoing **screening** methods are useful for identifying a ligand of a HI1648 **protein**, perhaps as a lead to a **pharmaceutical** compound for modulating the state of differentiation of an appropriate tissue. A ligand that binds HI1648, or related fragment thereof, is identified, for example, by combining a test ligand with HI1648 under conditions that cause the **protein** to exist in a ratio of **folded** to unfolded states. If the test ligand binds the **folded** state of the **protein**, the relative amount of **folded protein** will be higher than in the case of a test ligand that does not bind the **protein**. The ratio of **protein** in the **folded** versus unfolded state is easily determinable by, for example, susceptibility to digestion by a protease, or binding to a specific antibody, or binding to chaperonin **protein**,

o

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date
filed 12/18/97